

WHAT IS CLAIMED IS:

1. A high-pressure processing apparatus comprising:

a pressure vessel including a first vessel section and a second vessel section capable of axial separation from each other for treating a workpiece with a high pressure medium in a high-pressure processing chamber formed between said first and second vessel sections;

a face seal section formed in the contact area between said first and second vessel sections for sealing said high-pressure processing chamber;

a press apparatus for providing an axial force to the face seal section, said press apparatus being disposed so as to press against said second vessel section by contacting with a part of a surface of said second vessel section opposite to said first vessel section; and

a supplementary apparatus for changing the condition in said high-pressure processing chamber, said supplementary apparatus being disposed so as to be in contact with a part of the surface of said second vessel section, which surface is pressed by said press apparatus, and said part of the surface becoming in no contact with said press apparatus.

2. The high-pressure processing apparatus according to Claim 1, wherein said supplementary apparatus is disposed in the axial center of said second vessel section.

3. The high-pressure processing apparatus according to Claim 1, wherein said supplementary apparatus is a stirrer for stirring the pressure medium in said second vessel section.

4. The high-pressure processing apparatus according to Claim 1, wherein said supplementary apparatus is a driving apparatus for moving a stage for

the workpiece, said stage being disposed in said high-pressure processing chamber.

5. The high-pressure processing apparatus according to Claim 1, wherein said supplementary apparatus is a conducting pipe system for supplying the pressure medium into said high-pressure processing chamber.

6. The high-pressure processing apparatus according to Claim 1, wherein part of the surface of said second vessel section is in the form of an annular shape, said surface being pressed by said press apparatus and said surface being in contact with said press apparatus.

7. The high-pressure processing apparatus according to Claim 1, wherein a spacer unit is interposed between said press apparatus and said second vessel section, and wherein said press apparatus presses against said second vessel section through said spacer unit, so that the workpiece can be removed from said high-pressure processing chamber by removing said spacer unit.